

# Glossary

## TERMS USED IN THERAPEUTICS (SEE GLOSSARY IN EVIDENCE-BASED MENTAL HEALTH 1998 MAY FOR MORE DETAIL ON NUMBERS INCLUDED IN THE TABLES)

**Allocation concealed:** deemed to have taken adequate measures to conceal allocation to study group assignments from those responsible for assessing patients for entry in the trial.

**Allocation not concealed:** deemed to have not taken adequate measures to conceal allocation to study group assignments from those responsible for assessing patients for entry in the trial.

**Unclear allocation concealment:** the authors of the article did not report or provide us with a description of an allocation concealment approach that allowed for the classification as concealed or not concealed.

**Blinded:** The clinicians, patients/participants, outcome assessors and/or statisticians were unaware of who received which study intervention. Those blinded are indicated in parenthesis. If “initially” is indicated (eg, ...blinded [patients and outcome assessor initially]...) the code was broken during the trial, for instance, because of adverse effects.

**Blinded (unclear):** The authors did not report or provide us with an indication of who, if anyone, was unaware of who received which study intervention.

**Unblinded:** All participants in the trial (clinicians, patients/participants, outcome assessors, and statisticians) were aware of who received which study intervention.

## DEFINITIONS RELATING TO DATA PRESENTATION IN THERAPEUTICS

### When the experimental treatment increases the probability of a good event

**RBI (relative benefit increase):** the increase in the rates of good events, comparing experimental (EER) and control (CER) patients in a trial, also calculated as  $|EER - CER|/CER$ .

**ABI (absolute benefit increase):** the absolute arithmetic difference in event rates of a positive outcome,  $|EER - CER|$ .

**NNT (number needed to treat):** calculated as  $1/ABI$ , and denotes the number of patients who must receive the experimental treatment to create one additional improved outcome in comparison with the control treatment. The lower the NNT, the more effective the intervention.

### When the experimental treatment reduces the risk of a bad event (such as preventing relapse), the same calculations can be used but with slightly different terminology

**RRR (relative risk reduction):** the proportional reduction in rates of bad events between experimental (EER) and control (CER) participants in a trial, calculated as  $|EER - CER|/CER$ .

**ARR (absolute risk reduction):** the absolute arithmetic difference in event rates,  $|EER - CER|$ .

**NNT:** the number of patients who need to be treated to prevent one additional bad outcome, calculated as  $1/ARR$ .

### When the experimental treatment increases the probability of a bad event

**RRI (relative risk increase):** the increase in rates of bad events, comparing the experimental patients to control patients in a trial, and calculated as  $|EER - CER|/CER$ .

**ARI (absolute risk increase):** the absolute difference in rates of bad events, when the experimental treatment harms more patients than the control treatment, and calculated as  $|EER - CER|$ .

**NNH (number needed to harm):** the number of patients who, if they received the experimental treatment, will lead to 1 additional person being harmed compared with patients who receive the control treatment, and calculated as  $1/ARI$ .

**Confidence interval (CI):** The CI quantifies the uncertainty in measurement; usually reported as 95% CI, which is the range of values within which we can be 95% sure that the true value for the whole population lies.

## TERMS USED IN SYSTEMATIC REVIEWS (SEE GLOSSARY IN EVIDENCE-BASED MENTAL HEALTH 1998 NOV FOR MORE DETAIL)

**Odds of an event:** the probability, or event rate, divided by (1 - event rate).

**Odds ratio (OR):** a measure of the relative benefit of the experimental treatment that can be obtained by dividing the experimental odds by the control odds.

**Heterogeneity:** occurs when there is more variation between the study results than would be expected by chance alone. When heterogeneity occurs, a **fixed effects** pooled ORs may be invalid and a **random effects** pooled OR is preferred.

**Calculating an NNT using the patient's expected event rate (PEER):** if the PEER is known or can be estimated, a number needed to be treated (NNT) can be calculated from an OR using the following formula:

$$NNT = \frac{1 - [PEER \times (1 - OR)]}{(1 - PEER) \times PEER \times (1 - OR)}$$

**Effect size:** is an estimate of a treatment's effectiveness derived by dividing the difference in effect between the intervention and control group by the standard deviation of their difference. The proportion of control group scores that are less than the average score in the experimental group is obtained by referring the Normal distribution in statistical tables (table).

Percentage of control scores that would be below the average experimental score for various effect sizes

Effect size	Percentage of control scores which would be below the average experimental score
0	50
0.4	66
0.8	79
1.0	84
1.6	95

## TERMS USED IN DIAGNOSIS (SEE GLOSSARY IN EVIDENCE-BASED MENTAL HEALTH 1998 FEB FOR MORE DETAIL)

### The following terms are used in comparing a new test against a diagnostic (gold) standard

**Sensitivity:** the proportion of people who have the disorder (according to the diagnostic [gold] standard) who are detected by the test.

**Specificity:** the proportion of people who do not have the disorder (according to the diagnostic [gold] standard) who are determined by the test to not have the disorder.

**Likelihood ratio for a positive test result:** the likelihood that a positive test comes from a person with the disorder rather than one without the disorder =  $sensitivity/(1 - specificity)$ .

**Likelihood ratio for a negative test result:** the likelihood that a negative test comes from a person with the disorder rather than one without the disorder =  $(1 - sensitivity)/specificity$ .